



# **NASA Procedural Requirements**

**NPR 9095.1**Effective Date: September 30,  
2008Expiration Date: September  
30, 2023**COMPLIANCE IS MANDATORY FOR NASA EMPLOYEES**

---

## **Working Capital Fund Policies and Requirements (Revalidated with Change 1, on January 24, 2018)**

**Responsible Office: Office of the Chief Financial Officer**

### **Change History**

### **Preface**

## **Table of Contents**

- P.1 Purpose
- P.2 Applicability
- P.3 Authority
- P.4 Applicable Documents and Forms
- P.5 Measurement/Verification
- P.6 Cancellation

## **Chapter 1. NASA Working Capital Fund (WCF) Policies and Requirements**

- 1.1 Overview
- 1.2 Agency Requirements
- 1.3 Roles and Responsibilities
- 1.4 Objectives of the NASA WCF
- 1.5 Business Case Development for NASA WCF Candidates
- 1.6 Capitalization of the NASA WCF

## **Chapter 2. WCF Financial Management**

- 2.1 Overview
- 2.2 Agency Requirements

- 2.3 Roles and Responsibilities
- 2.4 Funds Managements
- 2.5 Stabilized Price and Rate Management
- 2.6 Cash Management
- 2.7 Revenue Recognition
- 2.8 Full Cost Management
- 2.9 Net Operating Results (NOR)
- 2.10 WCF Accounting
- 2.11 Financial Reporting

## **Chapter 3. Customer Orders**

- 3.1 Overview
- 3.2 Agency Requirements
- 3.3 Roles and Responsibilities
- 3.4 Annual Customer Orders
- 3.5 Accepting Customer Orders
- 3.6 Initiation of Customer Order Work
- 3.7 Customer Orders
- 3.8 Modifying Customer Orders
- 3.9 Terminations of Customer Orders
- 3.10 Financial Information, Billing and Collection, and Closeout

## **Appendix A. Definitions**

## **Appendix B. Acronyms**

## **Appendix C. Business Case Development Instructions for NASA Working Capital Fund Candidates**

## CHANGE HISTORY

<b>Change No.</b>	<b>Date</b>	<b>Description</b>
1	01/24/18	Revalidated with administrative changes to incorporate NPR 1400.1 requirements, and administrative edits to enhance clarity of directive. Removed Working Capital Fund Board to replace with Mission Support Council which governs the WCF; Deleted references to obsolete titles (e.g., Agency Comptroller).

# Preface

## P.1. Purpose

This NASA Procedural Requirements (NPR) document provides requirements for the chartering, and financial management of NASA Working Capital Fund (WCF) business entities. This NPR also provides requirements for the development, acceptance, and execution of NASA WCF customer orders.

## P.2. Applicability

This NPR is applicable to NASA Headquarters and NASA Centers, including Component Facilities and Technical and Service Support Centers. This language applies to Jet Propulsion Laboratory, a Federally Funded Research and Development Center, other contractors, grant recipients, or parties to agreements only to the extent specified or referenced in the appropriate contracts, grants, or agreements.

## P.3. Authority

- a. 31 U.S.C. Â§ 3512. "Executive Agency Accounting and Other Financial Management Reports and Plans
- b. 31 U.S.C. Â§ 3515, "Financial Statements of Agencies"
- c. 42 U.S.C. Â§ 2459i. "Working Capital Fund"
- d. Office of Management and Budget (OMB) Circular No. A-11, Preparation, Submission, and Execution of the Budget
- e. OMB Circular No. A-127, Financial Management Systems
- f. OMB Circular No. A-136, Financial Reporting Requirements
- g. Treasury Financial Manual, Supplement No. 2, U.S. Standard General Ledger (USSGL), Part 1, Fiscal Year 2008 Reporting T/L S2 08-03
- h. Federal Accounting Standards Advisory Board (FASAB), Statement of Federal Financial Accounting Standard (SFFAS) No. 4, "Managerial Cost Accounting"
- i. NASA Policy Directive (NPD) 9010.2, "Financial Management"

## P.4. Applicable Documents

- a. NASA Procedural Requirement (NPR) 9090.1, "Reimbursable Agreements"
- b. NPR 9410.1, "Planning, and Programming, Budgeting, and Execution"
- c. NPR 9420.1, "Budget Formulation"

d. NPR 9470.1, "Budget Execution"

e. NASA Continuous Monitoring Program

## **P.5. Measurement/Verification**

Quality control reviews and analysis of financial and budgetary reports and data submitted through the continuous monitoring program will be used to measure compliance with this NPR.

## **P.6. Cancellation**

None.

/S/

Terry Bowie

NASA Deputy Chief Financial Officer

# Chapter 1. NASA Working Capital Fund Policies and Requirements

## 1.1 Overview

1.1.1 The National Aeronautics and Space Administration (NASA) Working Capital Fund (WCF) was established to satisfy recurring agency-wide NASA requirements through use of a business like buyer and seller approach. In some instances, the "customers" contract with NASA "provider" organizations that have expertise in the required good or service and operate under financial management principles. Unlike profit-oriented commercial businesses, the WCF financial goal is to break even. WCF selling prices established in the budget are stabilized or fixed during execution to protect customers from unforeseen fluctuations that could impact on their ability to execute the programs.

1.1.2 The basic tenet of the WCF structure is to create a customer-provider relationship between those requesting a good or service (customer) and the WCF business entity (provider). This relationship is designed to make WCF managers and decision-makers at all levels more concerned with the costs of goods and services. Prior to the establishment of a business entity under the NASA WCF, a charter, which sets forth the mission and responsibilities of the business entity shall be prepared and submitted to the NASA Chief Financial Officer (CFO) for approval.

## 1.2 Agency Requirements

1.2.1 NASA WCF Mission. NASA's WCF Mission Statement is "to establish a revolving fund that promotes economy, efficiency, and accountability with fully reimbursed rates by focusing on streamlining operations, extending resources, measuring performance, and improving customer satisfaction."

1.2.2 Criteria For NASA Working Capital Fund Candidates. In order for a NASA agency-wide program or function to be considered for inclusion in the NASA WCF it must meet all of the following conditions:

- a. It must possess the capability to produce one or more goods or services on a recurring and relatively predictable basis that are needed by NASA, other Federal Government entities, and/or non-Government customers.
- b. Operation of the program or function as a NASA WCF business area will result in better quality goods/services and/or result in decreased costs to the Federal Government.
- c. The demand for the goods or services to be provided by the program or function must come from multiple customers within NASA and/or other Federal Government entities. A WCF business entity shall not be dependent upon a single customer for its existence. (Customers may be a U.S. State, Territory, or possession or political subdivision thereof; other public or private agencies; or any person, firm, association, corporation, or educational institution.)
- d. The entity must have the capability to charge prices or rates that approximate the full costs of the provided goods and services. (Annual stabilized prices and rates may be higher or lower than the

expected full costs in the execution year in order to recover losses or return gains incurred in a prior year. Additionally, stabilized prices and rates may be increased to accumulate funds for capital [i.e., investment] purchases.)

**1.2.3 Application and Selection of Business Entities.** The NASA WCF consists of business entities that are chartered (i.e., approved by the NASA CFO) and that are managed by program/function managers located within NASA. To become a WCF business entity, the entity must apply for approval by preparing a business case as described in Appendix A of this Volume. A Headquarters office or Center may propose a business function for inclusion in the NASA WCF by submitting a business case to the NASA CFO. Also, the NASA CFO may request that a business case be prepared for a specific business function by the cognizant functional office. Under either event, an application for designation as a NASA WCF business entity shall be prepared in the form of a complete business case as specified in Appendix A to this Volume.

**1.2.4 Charters.** The NASA business entities to be financed through the NASA WCF shall be chartered under the NASA WCF to achieve the objectives contained in Section 1.6 of this Chapter. A proposed charter shall be submitted along with the business case by the Program/Function Manager through NASA Center Director or Center CFO for final approval by the NASA CFO. Before charter preparation, actions shall be taken to ensure that the proposed business entity meets the criteria listed in Section 1.2.2 of this Chapter. After charter approval, the chartered WCF business entity shall review it annually to assure it remains current. Changes, if needed, to maintain its currency shall be prepared and submitted to the NASA CFO for approval.

## 1.3 Roles and Responsibilities

**1.3.1 WCF Corporate Board.** The responsibilities of the WCF Corporate Board are described here in the context of a single corporate board. However, the NASA CFO may elect to establish separate boards to oversee the operations of individual WCF business entities. In those cases, the individual boards shall have the same responsibilities, although limited in scope to their respective business entity, as listed below.

**1.3.1.1 Responsibilities.** The mission of the NASA WCF Corporate Board is to work collaboratively to review and recommend WCF policies and procedures for consideration and acceptance by the NASA CFO. The Board shall meet on a periodic basis, generally quarterly and perform the functions listed below:

- a. Comment upon proposed and current NASA WCF policies and their impact on NASA.
- b. Review business entities for inclusion or exclusion in the NASA WCF.
- c. Review and recommend changes to a NASA WCF business entity's charter.
- d. Evaluate performance of individual business entities and the impact of that performance on the WCF cash balance, and on operating and capital investment goals.
- e. Establish sub-groups as needed to address issues and concerns of Board members or others not directly represented on the Board.
- f. Provide feedback on WCF rate adjustments and other relevant issues that arise through the year that impact the WCF or its customers.

1.3.1.2 Composition. The NASA Deputy Chief Financial Officer (DCFO) shall select Board members and act as chair. The Board members shall consist of one representative or their designated alternate from the following organizations:

- a. NASA Agency OCFO, Director, Financial Management Division.
- b. NASA Agency Comptroller.
- c. NASA Centers CFOs - total of three Centers represented.
- d. Customer Representation.
- e. Other representatives as deemed necessary by the NASA CFO.

1.3.2 The NASA CFO or Designee shall:

- a. Establish Agency policy on NASA WCF operations.
- b. Provide oversight on all financial management activities relative to the operations of the NASA WCF.
- c. Authorize or approve the NASA WCF charters of specific business entities to be included in the NASA WCF, as well as, the terms under which such business entities shall operate.
- d. Rescind the NASA WCF Charters of specific business entities that no longer meet NASA WCF criteria or that may be operated more efficiently under other financing.

1.3.3 The NASA Comptroller shall:

- a. Advise the NASA CFO on WCF budgetary issues.
- b. Review and approve operating and capital budgets and monitor execution of the budget and analyze the results thereof.
- c. Provide WCF operations oversight through budget execution reviews of reimbursements and outlays.

1.3.4 NASA Officials in Charge of Headquarters Offices and The Directors of NASA Centers or Their Designees Who Have Business Entities Financed Under The NASA WCF shall:

- a. As appropriate, recommend organizations or functions under their control be transferred to the WCF.
- b. Assign responsibility and authority to designated officials for management and operation of NASA WCF business entities.
- c. Assure that NASA WCF business entities operate within approved funding limitations.
- d. Recommend rescission of charters of existing NASA WCF business entities when they no longer meet NASA WCF criteria or that may be operated more efficiently under other financing.

1.3.5 The Management of a NASA WCF Business Entity shall:

- a. Comply with and recommend changes to this and other governing regulations.
- b. Develop business entity specific WCF implementation policies and procedures.



- c. Identify to higher management any impediments to achievement of the business entity's planned performance and cost goals.
- d. Identify and justify to higher management those investments that will produce future improvements in effectiveness and efficiency.
- e. Initiate change, as needed, to the charter of the WCF business entity as well as annual charter renewals.
- f. Measure performance in quantitative and qualitative terms as deemed useful and as prescribed by the NASA CFO.
- g. Continually ensure that processes, procedures, policies, etc. will improve customer satisfaction through increased quality, decreased cost, quicker delivery, etc.
- h. Prepare a business case to support any proposal to add a new line of business to the entity's operations.

## 1.4 Objectives of the NASA WCF

### 1.4.1 The NASA WCF is designed to:

- a. Provide a more effective means for controlling the costs of goods and services produced or furnished by NASA WCF business entities, and a more effective means for financing, budgeting, and accounting for the costs thereof.
- b. Create and recognize contractual relationships between NASA WCF business entities and those activities that budget for and order the end goods or services.
- c. Provide managers of NASA WCF business entities the financial authority and flexibility required to procure and effectively use manpower, materials, and other resources.
- d. Encourage more cross servicing within NASA and among the Federal departments and agencies, with the aim of obtaining more economical use of facilities.
- e. Facilitate budgeting for and reporting of the costs of end products. This will underline the cost consequences of choosing between alternatives.

### 1.4.2 Specific objectives include the following:

- a. Furnish managers of NASA WCF business entities with modern management tools comparable to those utilized by efficient private enterprises engaged in similar types of activities.
- b. Improve cost estimating and cost control through comparison of estimates and actual costs.
- c. Obtain alert, forward-looking financial planning at NASA WCF business entities by making them financially dependent on reimbursements received for goods and services furnished in fulfilling orders from customers.
- d. Encourage producers of goods and services to coordinate labor forces and inventories with workload, budgeting, and cost control.
- e. Instill in the officials of ordering activities a greater sense of responsibility and self-restraint in balancing the cost of specific goods and services to be ordered against the benefits and advantages of

their procurement, especially in the light of alternative or competing demands.

f. Place ordering agencies in the position of critically evaluating purchase prices (that is, costs of performing business entities) as well as quality and timely delivery of goods and services ordered.

g. Enable ordering agencies to budget and account on an "end-product" basis (the same as when buying from commercial contractors), thereby simplifying budget planning, budget presentations, budgetary control, and accounting procedures for both producers and ordering agencies.

h. Establish whenever feasible, standard prices or stabilized rates and unit prices for goods and services furnished by NASA WCF business entities, thus enabling ordering Agencies to more confidently plan and budget.

i. Encourage ordering agencies' management to improve program planning and scheduling in response to producers' efforts to plan and negotiate for orders as far in advance as feasible.

j. Provide flexibility within budget cycles to respond to changes in supply and demand.

## **1.5 Business Case Development for NASA Working Capital Fund Candidates**

1.5.1 Use of the NASA WCF presents organizations with the ability to finance operations in a manner more consistent with commercial best practices. It allows more flexibility in operational planning, procurement, and customer relationship management. However, before a business function's funding source is converted from appropriated to working capital funds, NASA must ensure business viability and prepare for the transition to the WCF by preparing a comprehensive business case. In completing the business case, it is helpful to think of the candidate organization as a private company (one whose financial goal is to break even over time rather than make a profit) seeking investment funding. The business case should provide sufficient information to allow a third party to decide whether or not to invest funds in the venture. In general the business case:

a. Describes and quantifies both the risks and benefits associated with transitioning to the NASA WCF.

b. Provides the NASA WCF managers with sufficient information to make an appropriate decision on whether the candidate should ultimately be included in the WCF.

1.5.2 Appendix A of this Volume is a set of instructions for preparing a business case for proposed WCF business entities and lines of business. The requirement for documenting the business case as described in Appendix C applies to all proposals for new WCF business entities, as well as, the addition of new lines of business within existing WCF business entities.

## **1.6 Capitalization of the NASA WCF**

1.6.1 Transfers of Inventory and Property. The NASA FY 2003 appropriation language states, the capital of the fund consist of "... the reasonable value of stocks of supplies, equipment, and other assets and inventories on order that the Administrator transfers to the fund..." Any transferred capital equipment will be valued at book value (original cost less accumulated depreciation). Inventories will be valued at original cost.

1.6.2 Appropriation. NASA did not receive a cash corpus to begin initial operations. However, NASA may request an appropriation of funds (to account 80X4546) in its Working Capital Fund activity's President's budget submission to Congress to supplement its resources when the level of anticipated cash available is estimated to be insufficient at any time throughout the year of budget execution for the WCF activity to remain solvent and to be able to pay for its operating and capital budget requirements.

# Chapter 2. WCF Financial Management

## 2.1 Overview

2.1.1 This chapter establishes National Aeronautics and Space Administration (NASA) Working Capital Fund (WCF) financial management policies for the management of the WCF with particular emphasis on those areas that differ from the financial management requirements of appropriated funds.

## 2.2 Agency Requirements

2.2.1 Conformance with Policy Issuances. The financial management and financial operations of each WCF business entity shall comply with all the applicable policies and requirements applicable to Federal Agencies including those contained in Federal legislation; the concepts, standards and other issuances of the Federal Accounting Standards Advisory Board (FASAB); requirements issued by the Office of Management and Budget (OMB); and the U.S. Treasury Department. Also, the policies, procedures, and reporting requirements contained within the other NPRs apply to NASA WCF business entities unless otherwise specified.

2.2.2 Operational Funding. The WCF operations are funded by the reimbursements it receives from its customers for the goods or services it provides. This arrangement is stated in Title 42 United States Code (U.S.C.) § 2459i as follows. "The fund shall be reimbursed, in advance, for supplies and services at rates that will approximate the expenses of operation, such as the accrual of annual leave, depreciation of plant, property and equipment, and overhead."

2.2.3 Availability of WCF resources. Amounts earned by the WCF are available without fiscal year limitation. This authority is found in Title 42 U.S.C. § 2459i, "Amounts in the fund are available without regard to fiscal year limitation." With regard to funds provided by customer orders, this unlimited availability only applies to amounts that have been earned by the WCF and recorded as revenue. The unearned amount of advances for customer orders retains the fiscal year limitation of the customer's appropriation.

2.2.4 NASA WCF Reimbursement Concept. NASA WCF business entities shall charge for goods and services provided. A NASA WCF business entity shall operate in a business-like manner, recovering full costs for goods and services provided based on a price schedule established through a rate-setting process. The amount charged to the customer, in addition to operating expense recovery shall include amounts sufficient to finance continuing operations, acquire capital assets, and adjust for prior year results of operations.

2.2.5 Distinction between a WCF Business Entity and a Reimbursable Agreement. A fundamental distinction between the WCF and a reimbursable agreement is that the NASA WCF bills its customers a pre-set price for the good or service it provides while, under a reimbursable agreement, a customer is billed for costs incurred. The pre-set price billed by the WCF is designed to recover the operating and capital budget costs of the performing WCF business entity. However, during execution of the order, the price may be more than, or less than costs incurred by the WCF entity. This is normal and expected because the price is usually set in advance of performance so that the ordering activity can better budget for the acquired service. The WCF rates established for

subsequent fiscal years are adjusted up or down based on any current year operating losses or gains in order to avoid accumulating gains or losses in the fund over time.

## **2.3 Roles and Responsibilities**

### **2.3.1 Agency Chief Financial Officer (CFO) shall:**

- a. Establish procedures ensuring that NASA WCF financial policies are implemented.
- b. Exercise oversight with regards to WCF financial management and financial operations.
- c. Develop accounting and financial management reports to satisfy external reporting requirements, and to support the management responsibilities of WCF management and the Agency Office of the Chief Financial Officer.
- d. Advise NASA Headquarters, Center, and WCF managers on the accounting and reporting policies used in the NASA WCF.
- e. Issue WCF instructions when necessary to provide for unique requirements within a WCF business entity and to provide detailed operating instructions.
- f. Monitor compliance with this guidance and other policy issuances through analysis of reports, audits, and reviews of business entity operations.

### **2.3.2 WCF Business Entity Manager shall:**

- a. Provide periodic financial and management information as required by the NASA CFO.
- b. Document and maintain records on information used to establish rates and prices, as well as specific methods used to determine them.
- c. Incur obligations and costs as necessary and allowable to perform the business entity mission.
- d. Control costs in line with the annual operating budget as approved by the NASA CFO.
- e. Actively manage the business entity cash balance in order to maintain the required level of operation cash.

## **2.4 Funds Management**

2.4.1 Financial resources to establish the working capital fund and to permit continuing operations are generated by reimbursements received in advance for goods provided or services performed by the NASA WCF. A budgetary resource, that is immediately available for outlay even though the outlay may not occur until a future date, must support all NASA WCF obligations. A sufficient fund balance with the Treasury must support all NASA WCF cash outlays.

2.4.2 Recording Anticipated Reimbursements. Effective 1 October of each fiscal year and based upon the approved budget, each NASA WCF business entity shall record its anticipated reimbursements for the fiscal year. The value recorded as anticipated reimbursements is an estimate of the annual dollar volume of business expected. Each customer order accepted reduces anticipated reimbursements dollar for dollar. At fiscal year end, any remaining balance of anticipated reimbursements is reduced to zero. Although entry of the anticipated reimbursements involves the

use of budgetary accounts, it does not provide budgetary resources available for obligation. Reimbursable budgetary resources are available until customer orders are received and accepted.

**2.4.3 Antideficiency Act.** The Antideficiency Act shall apply to the NASA WCF at the Treasury account level, i.e., 80X4546 rather than at a lower level such as NASA Center or WCF business entity. See NPR 9050.3, Antideficiency Act for a full description of the Antideficiency Act requirements.

**2.4.4 Restrictions on Use of Customer Appropriations.** Statutory limitations and restrictions imposed on the appropriated funds of a NASA WCF customer are not changed when the customer places an order with the NASA WCF. A NASA WCF customer cannot use its appropriated funds to do indirectly, (i.e., through placement of an order with a NASA WCF business entity, what it is not permitted to do directly). Thus, the availability of an appropriation cannot be expanded or otherwise changed by transfer to the NASA WCF. Appropriated funds cited on customer orders are available only for the purposes permissible under the source appropriation and remain subject to the same restrictions. The customer is primarily responsible for the determination of the applicability of the ordering appropriation. However, if instances arise when it is apparent that the ordering appropriation is not appropriate for the purpose provided, then the order should be returned with a request for an applicable appropriation cite.

## **2.5 Stabilized Price and Rate Management**

**2.5.1** The NASA WCF business entities operate on a break-even basis. Customer prices and rates shall be established on an end product basis whenever feasible. The term "end product" means the good or service requested by the customer (output) rather than processes or other inputs in the achievement of the requested output (for example, the product requested rather than the direct labor hours expended in the achievement of that product).

**2.5.2** Prices and rates are required to be established during the budget process at levels estimated to recover the planned cost of goods or services to be provided, prior period gains and losses occurring as a result of variations in program execution, as well as, approved surcharges for capital asset acquisition and other Center CFO approved purposes. The budget process is the mechanism used to ensure that adequate resources are budgeted in the customer's appropriated fund accounts to pay the established prices and rates. Specific budget formulation requirements are contained in NPR 9420.1.

**2.5.3** Private parties and concerns when authorized by law including foreign governments, state and local governments shall reimburse the NASA WCF for the full costs incurred by the federal government. Full costs for foreign governments, state and local government, and private party sales shall include unfunded costs that are not charged to the NASA or other federal government customers (such as unfunded civilian retirement and postretirement health benefits cost). NASA shall not retain amounts collected for unfunded civilian retirement and postretirement health benefits costs, rather, such amounts shall be credited to the general fund of the U.S. Treasury as miscellaneous receipts.

**2.5.4** Prices and rates shall remain stabilized for the entire fiscal year except that the NASA CFO may, upon request of a WCF business entity, authorize a change in the price or rate schedule during a fiscal year.

## **2.6 Cash Management**



2.6.1 Advances/Cash. The Agency's FY 2003 appropriation language provides that "...The fund shall be reimbursed, in advance, for supplies and services at rates that will approximate the expenses of operations..." Accordingly, the WCF business entities shall be advanced funds identified in WCF customer orders during the fiscal year, as required, to enable the WCF activity to pay for its costs of operation.

## 2.6.2 WCF Cash Balance.

2.6.2.1 The cash management policy is to maintain the minimum cash balance necessary to meet both operational requirements and disbursement requirements in support of the capital program. Cash generated from operations is the primary means of maintaining adequate cash levels. The ability to generate sufficient cash is dependent on setting rates to recover full costs to include prior year losses; accurately projecting workload; and meeting established operational goals.

Table 2-1 Cash Balance Status Management Actions

<b>Actual Days of Cash On Hand</b>	<b>Calculated Days</b>	<b>Required WCF Service Provider Actions</b>
Based on 30-day cash-on-hand requirements	Based on calculated cash reserve level	
60 Days	2 x Calculated Cash Reserve Level	Continue active cash management.
45 Days	1.5 x Calculated Cash Reserve Level	Begin more-detailed cash management to understand factors driving cash levels down. Notify WCF Management Team if reserve levels continue to fall (notification required below 35 days cash on hand or 1.2x calculated cash reserve level).
30 Days	1 x Calculated Cash Reserve Level	WCF Management Team and DCFO must be notified of any service provider whose cash balance falls below 30 days or their calculated cash reserve level. The WCF Management Team will receive weekly updates until the cash levels rise above this threshold. Furthermore, based on remedial actions proposed by the service provider, the Management Team and/or DCFO may

		Management Team and/or CFO may require a meeting to discuss proposal.
20 Days	2/3 x Calculated Cash Reserve Level	CFO must formally approve cash reserve levels below 20 days. Service provider must put more-aggressive remedial action plan in place to resolve cash shortfall. WCF Management Team must be notified of all new disbursements
10 Days	1/3 x Calculated Cash Reserve Level	CFO must be briefed on a weekly basis on the current reserve levels and progress on implementing the remedial action plan. All new disbursements must be approved by the WCF Management Team.

2.6.2.2 Any transfers of cash between NASA WCF business entities shall not be made without prior consultation with and approval of the NASA CFO.

2.6.2.3 WCF business entities shall justify their cash level but, ordinarily, should maintain at least 30 workdays of operational cost plus cash adequate to meet six months of capital disbursements. Cash levels shall be calculated using the following formula: Total operating budget disbursements for a fiscal year divided by either 260 or 261 available workdays in a fiscal year multiplied by the number of days cash desired. This amount is then added to the projected disbursements for six months of Capital Investment Program Outlays.

2.6.2.4 To facilitate the cash management process, WCF business entities shall develop a cash plan that includes a monthly phasing of estimated collections, disbursements, appropriations, and other cash transactions. This annual cash plan shall be initially developed during the budget process and will be an integral part of the budget document. The cash plans should lead to increased management attention and result in reduced costs, and timely billings, collections, and disbursements. The cash plan shall be used to compare actual cash to plan cash during budget execution. The cash plan shall be provided to NASA CFO at the beginning of each quarter.

2.6.2.5 WCF business entities that fail to maintain adequate cash reserves will be required to follow the actions identified in the following table. In general, falling cash levels will necessitate a higher level of senior WCF management oversight--ultimately leading to cessation of business operations in the extreme case. Business entities shall be responsible for developing and implementing remedial action plans to bring cash reserves to the appropriate level at the soonest possible time.

## 2.7 Revenue Recognition

2.7.1 The percentage of completion method shall be used by all WCF business entities for recognizing revenue and costs on all customer orders. Under this method, the revenue earned and associated costs incurred on an order shall be recognized at least monthly. Revenue and costs must be recognized in the same accounting period. The amount of revenue recognized cannot exceed the amount specified in the customer order.

## 2.8 Full Cost Management



2.8.1 The objective of NASA full cost management is to allocate all NASA costs to major activities and thereby enhance cost-effective mission performance by providing managers with information on infrastructure costs, and their relationship to projects to better support plans and decisions. Under the full cost approach all costs will be allocated to projects. See FASAB Statement 4, Managerial Cost Accounting and NPR 9060.1, Cost Accruals, for details regarding the recording of accrued costs.

## 2.8.2 Annual Leave.

2.8.2.1 Title 42 U.S.C. § 2459i, "Working Capital Fund" states "...The fund shall be reimbursed, in advance, for supplies and services at rates that will approximate the expenses of operations, such as the accrual of annual leave."

2.8.2.2 Accounting for Accrued Annual Leave of Current Employees. The accounting treatment of annual leave within a WCF differs from that of an appropriated fund. In an appropriated fund, the accrual of annual leave is unfunded. However, as required by the NASA WCF appropriation language and OMB Circular No. A-11, Preparation, Submission and Execution of the Budget, the accrual of annual leave within the NASA WCF is funded. Therefore, the rate charged by a WCF business entity to its customers shall include an amount estimated sufficient to fund accrued annual leave.

2.8.2.3 Accounting for Accrued Annual Leave of Terminated Employees. Employees terminate service when they leave (i.e., retire from) federal government service. When an employee terminates service, he/she is paid for accrued annual leave. It is only at this point that an obligation for annual leave payable is recorded in addition to the normal payroll accrual obligation.

2.8.2.4 Accounting for Accrued Annual Leave of Transferred Employees. Personnel assigned from an appropriated fund activity to a WCF business entity generally are accompanied by a liability for the amount of accrued earnings and annual leave earned by those employees prior to their transfer. Ordinarily, payment in the form of cash or other agreed upon equivalent assets such as operating materials and supplies or equipment should be made to the receiving WCF business entity for the amount of the liabilities assumed. However, in some cases, full payment for liabilities assumed of transferred personnel may not be received.

2.8.2.5 Amortization of Unfunded Annual Leave. A WCF business entity that does not receive payment from the transferor appropriation to cover the leave liability of civil service employees capitalized into the WCF must include an amount in its rates to fund the unfunded liability. Ordinarily, the leave liability transferred into the fund will be amortized over five years and charged as a WCF operating expense; however, depending upon how a five-year amortization affects customer rates, a WCF business entity may request a longer or shorter amortization period from the NASA CFO.

## 2.8.3 Depreciation of Capital Assets

2.8.3.1 Depreciation is the recognition of cost over the useful life of the asset. Thus, depreciation expense recovery (through inclusion in stabilized rates or prices) results in a cash accumulation that can be used to acquire assets to replace those wearing out. Recovery of depreciation expense is the primary financing source for the NASA WCF capital investments.

2.8.3.2 Depreciation of capital equipment will be fully reflected in the operating costs and rates of WCF business entities.

2.8.3.3 Depreciation expenses shall be calculated and accumulated as required in NPR 9250.2, Property, Plant, and Equipment and Operating Materials and Supplies.

2.8.3.4 Depreciation of capital assets, that are transferred into a WCF business entity without reimbursement that have no preexisting depreciation schedules or accumulated depreciation, shall be calculated based on the net value (original acquisition cost less calculated accumulated depreciation) plus any associated costs for transportation, installation, and other related costs necessary to put the asset into operational use.

## **2.9 Net Operating Results (NOR)**

2.9.1 The NOR provides the overall net operating results expected to be achieved in the WCF by the end of the year. The NOR provides a primary financial management goal and will be used in conjunction with other performance measures to assess the overall operational effectiveness of the business entity. NOR is the net of revenues, expenses, gains and losses of the current fiscal year.

## **2.10 WCF Accounting**

2.10.1 Accounting Requirement. The NASA WCF is required to account for its financial operations in accordance with all accounting principles and policies applicable to the Federal government unless specifically exempted. The NASA accounting requirements contained in other NPRs are applicable to the NASA WCF unless specifically exempted.

2.10.2 The United States Standard General Ledger (USSGL) shall be used by NASA WCF business entities to record budgetary and proprietary accounting transactions on a double-entry basis. The USSGL attributes are one component of detailed data in agency financial systems related to the external reporting financial statements. Each USSGL account has associated attributes related to external financial reporting. Examples of attributes are: (1) Federal/Nonfederal, (2) Trading Partner, (3) Exchange/Nonexchange, (4) Budget Functional Classification, and (5) Custodial/Noncustodial. While the preceding are examples of attributes, it is not an exhaustive list of attributes required by NASA to adequately prepare its financial statements.

2.10.3 The Agency OCFO, Director of Financial Management, will develop and maintain the general ledger attributes for both internal and external NASA reporting requirements to include appropriated funds and working capital funds. This shall ensure consistency in the application of those attributes within NASA. In other words, an attribute shall have a common meaning wherever it is used.

## **2.11 Financial Reporting**

2.11.1 WCF Financial Statement. Under the provisions of Title 31 U.S.C. 3515, the NASA WCF is required to produce audited annual financial statements. The statements will be included in NASA's Annual Performance and Accountability Report. The specific financial statement reporting requirements are contained in OMB Circular No. A-136, Financial Reporting Requirements. NPR 9310.1 and NPR 9311 also identify recurring external reporting requirements applicable to the WCF. However, a WCF may develop financial reports specifically designed to assist in management of a WCF business entity.

2.11.2 Audits of Financial Statements. Under the provisions of Title 31 U.S.C. § 3515, NASA is required to prepare audited financial statements covering all its accounts and associated activities including the NASA WCF. The NASA WCF business entities are subject to audit by the NASA Inspector General, by the Government Accountability Office, and by other parties when contracted or otherwise authorized. Copies of audit reports shall be submitted to the Agency CFO.

# Chapter 3. Customer Orders

## 3.1 General

3.1.1 This section establishes the Working Capital Fund (WCF) financial management policies related to (1) entering into customer orders; (2) using Work Breakdown Structures (WBS); and (3) advance billing and collecting. NPR 9095.1, Reimbursable Agreements, establishes policies relating to reimbursable agreements. Many of those policies are equally applicable to WCF customer orders; however, there are significant differences between reimbursable agreements (which charge actual performance costs) and WCF customer orders (which charge a pre-set stabilized rate or price).

## 3.2 Agency Requirements

3.2.1 All customer orders accepted by a WCF business entity shall be in writing and shall call for specific goods, work, or services. Each WCF business entity shall record promptly all customer orders accepted and shall account for the status of all orders in terms of deliveries, billings, and unfilled balances.

3.2.2 Customer orders (funded requests for goods or services) create a binding contractual relationship between a NASA WCF business entity and its customer upon acceptance. Customer orders also provide the budgetary and cash resources necessary to finance operations. WCF business entities must be prepared to meet all of the performance requirements contained in the customer orders and the associated Service Level Agreement (SLA) including those for quality, quantity, time, and price.

3.2.3 A WCF customer order requests a WCF business entity to provide a specific good or perform a specific service. Also, the customer provides the WCF with advance funding for the good or service ordered. After acceptance of the customer order by the WCF business entity manager, the WCF business entity then requests advance funding to begin work; provides the good or service requested; status bills the customer the agreed-upon price; and recognizes funding received as revenue based on goods or services fully or partially completed.

3.2.4 A NASA WCF business entity shall not initiate work or services or incur obligations until customer orders are signed and advanced funding is received.

3.2.5 Goods or services that are needed on a recurring and predictable basis may be ordered on an annual basis. All customer orders between a WCF business entity and its customer document the planned good(s), service(s), and price(s) and are signed and approved by the customer and the WCF business entity manager. Annual customer orders should be prepared and approved by the customer and WCF business entity manager before the beginning of the applicable fiscal year.

3.2.6 Either the customer order or the SLA shall include the customer's best estimate of the service levels required. Significant variances in the level of actual services consumed should be communicated to the WCF business entity as a modification to the customer order. In all cases, the customer is responsible for the determination that funds cited on a customer order are an appropriate use of the cited appropriation. In the event that the NASA has not received its new fiscal year budget, customer orders shall be funded consistent with NASA Agency Office of the CFO guidance

to implement the Continuing Resolution legislation.

3.2.7 The responsibilities in the NPR 9095.1, Reimbursable Agreements, are the same for WCF customer orders as they are for reimbursable agreements except that an Estimated Price Report (EPR) is not required for WCF business entities. An EPR is not required because WCF business entities charge on the basis of a pre-set stabilized rate or price and not actual cost.

3.2.8 Authorized Customers. Customers of a NASA WCF business entity may be:

- a. Any NASA Center, organization, office, or other element.
- b. Non-NASA Federal government agencies.
- c. Private parties and concerns including foreign, state and local governments as authorized by law.

## **3.3 Roles and Responsibilities**

3.3.1 The Manager of the WCF Business Entity shall:

- a. Establish a stabilized rate structure for the goods and services the entity provides.
- b. Formally accept customer orders and provide a signed acceptance copy to the customer.
- c. Satisfy the quality, quantity, time, and price requirements of accepted customer orders.
- d. Not initiate work until the customer order is signed by both parties and a cash advance has been received from the customer.
- e. Provide the customer a status bill monthly and liquidate the bill amount from the remaining cash advance. This requirement does not apply to NASA WCF business entities providing services through a Government-Wide Acquisition Contract (GWAC).

3.3.2 NASA WCF Customers shall:

- a. Accurately identify the services required, including the quantity, quality, and period of delivery.
- b. Record a commitment in the amount of the customer order when submitted to the WCF Business entity.
- c. Record an obligation when the WCF business entity accepts and signs the customer order.
- d. Provide the WCF business entity a cash advance prior to the scheduled start of the requested work.
- e. Monitor the performance of the customer order and negotiate modifications if needed due to changes in workload.

## **3.4 Annual Customer Orders**

3.4.1 During the Planning, Programming, Budgeting, and Execution (PPBE) process, a WCF business entity should request its customers to identify planned WCF customer orders for the upcoming fiscal year. The planned customer order information should reflect the amount of goods or services required and sufficient funding committed or planned for a full fiscal year.

3.4.2 Customers are responsible for determining their annual needs based on historical information and feedback from their internal users (the process to gather this information is at the discretion of each customer organization). After determining their annual needs, customers complete the WCF order, which includes a listing of the services offered and a unit price for each service. A completed WCF order identifies the amount of funds needed for each specific service.

3.4.3 The customer order serves as a formal funding agreement between the customer and a WCF business entity. Customers may cite their unexpired appropriations, new funds or a combination of both.

3.4.4 If a customer order cites new appropriated funds anticipated in the upcoming fiscal year, then the customer order is subject to the availability of funds. As such, the customer must designate on the customer order that the customer order is "Subject to the Availability of Funds."

3.4.5 After a customer order is prepared, it must be signed by a customer official with authority to commit the funds cited and by the customer's budget officer who certifies that funds have been committed/reserved. The budget officer/ fund control officer's signature attests that the funds are "available, reserved, and appropriate for the service identified."

3.4.6 Prior to sending the customer order to a WCF business entity, the customer's budget officer commits the funds cited on the customer order. For newly appropriated funding, once Congress approves the budget of the customer's agency (i.e., NASA, Department of Defense (DoD), or other Federal Agency), customers must immediately commit those funds and notify the WCF business entities that those funds have been committed and can now be obligated.

3.4.7 Prior to decommitting funds, the customer must first notify the WCF business entity of the intent to decommit the customer's funds. If the funds need to be decommitted, the customer must fully explain the rationale behind the decommitment to the satisfaction of the WCF business entity. Funds shall not be decommitted unless there is a mutual signed agreement between the two parties.

3.4.8 If a customer receives a WCF service prior to completing a customer order or providing the necessary documentation showing that the funds have been committed, the WCF business entity shall notify the customer of the need to immediately prepare a new customer order or modify an existing customer order with the appropriate funding for the required level of service. If the customer order modification is not submitted to the WCF business entity manager by the close of the following advance billing cycle (within approximately 30 days), the WCF business entity manager may, if necessary, raise the issue to the Center Chief Financial Officer (CFO), NASA CFO or WCF Corporate Board for their review and resolution.

3.4.9 Distinction Between a WCF Customer Orders and a Reimbursable Agreement. There is a fundamental distinction between a customer order placed with a WCF business entity and a reimbursable agreement accepted by any other NASA entity. The WCF customer order is priced based on a stabilized rate per unit for each product the customer orders. The customer is billed for the number of units provided times the stabilized rate. In contrast the priced charged under a reimbursable agreement is the actual cost incurred less any costs waived by NASA. The pre-set price billed by the WCF is designed to recover the operating and capital budget costs of the performing WCF business entity. However, during execution of the customer order, the price that results from the stabilized rate may be more than, or less than costs incurred by the WCF entity. This is normal and expected because the stabilized rate is usually set in advance of performance so that the ordering activity can better budget for the acquired service. Operating gains and losses of a WCF are



recovered from customers in the rates established for subsequent fiscal years.

## 3.5 Accepting Customer Orders

3.5.1 Customers provide the signed and approved WCF customer order (plus any other required documentation) to the WCF business entity. Upon receipt, the WCF business entity assigns a unique Customer Order Number.

3.5.2 While the customers are responsible for ensuring the accuracy and completeness of the customer order, the WCF business entities are responsible for assessing their ability to provide the requested goods or services. A WCF business entity shall discuss any problems with its customers prior to acceptance of the orders, and return incomplete customer orders to the customer for correction and resubmission. Upon acceptance of the customer order and signature, the WCF business entity manager provides copies of the signed forms to the customer order originator. The signed customer order, or notification of the signing, is documentation for the customer to remove its commitment and move the funding to undelivered orders-obligations prepaid/advanced or undelivered orders-obligations unpaid status.

3.5.3 Following approval by the customer and the WCF business entity manager, customer orders are binding on both parties and cannot be modified except by mutual agreement through a formal modification. Therefore, customers should verify the accuracy of their orders and WCF business entities should ensure their ability to provide the requested goods or services prior to signing the customer order. Problems related to a customer order should first be addressed between the customer and the WCF business entity. If these parties cannot resolve the problem, the WCF business entity manager may raise the issue to the Center CFO, NASA CFO, or WCF Corporate Board as necessary.

3.5.4 After acceptance of the customer order by the WCF business entity manager, delivery of services begins consistent with the terms of the customer order.

## 3.6 Initiation of Customer Order Work

3.6.1 A NASA WCF business entity shall not start work for a customer until:

- a. A customer order has been signed by both NASA and the customer;
- b. A WBS has been assigned, (The process for obtaining a WCF customer order number is the same as that for obtaining a WBS for a reimbursable agreement.);
- c. Adequate WCF resource authority has been received from Headquarters; and
- d. WCF budgetary resources are available.

3.6.2 A WCF business entity can record WCF budgetary resources when it has received one of the following:

- a. A fully executed customer order from another Federal entity accompanied by a cash advance; or
- b. A fully executed customer order from another Federal entity; or
- c. An order from a non-federal customer accompanied by an advance; or

d. An order from a non-federal customer unaccompanied by an advance where a waiver has been received from the Center Deputy CFO or the Agency OCFO, Director, Financial Management Division.

## 3.7 Customer Orders

3.7.1 The WCF business entities are responsible for providing monthly status billing statements to their customers. The WCF business entities review the statements for accuracy to ensure that the appropriate customer is charged for the goods received or services provided. Upon receipt of the status billing statements, customers are responsible for analyzing the reports and monitoring their "burn-rate" or actual dollars charged for those services delivered. This requirement does not apply to NASA WCF business entities providing services through a GWAC.

3.7.2 Customers should notify the WCF business entity concerning erroneous status billing information and work to resolve the problem prior to the next status billing cycle (within approximately 30 days). If a status billing problem cannot be resolved within this time period, the customer should raise the issue to the Center CFO, Agency CFO, or WCF Corporate Board as necessary.

3.7.3 As the end of each fiscal year approaches, customers may request a deobligation of their funds for goods or services ordered that were not provided. A return of customer funds near the end of a fiscal year is permissible so long as the WCF business entity has not commenced work on the good or service ordered or incurred an obligation for those goods or services. By the beginning of the fourth quarter, customers should submit their modifications to customer orders that reflect estimated reduced service levels to the WCF business entity managers.

## 3.8 Modifying Customer Orders

3.8.1 Once a customer order has been signed by a customer and accepted by a WCF business entity manager, it is binding on both parties and can be modified only through mutual agreement. A modification of the customer order is required to change ordered service requirements and add additional funds or remove surplus funds. Customers should notify the WCF business entity prior to the fifteenth day of the month to effect changes in the level of service consumption and status billing for the following month. Modifications may be requested at any time during the year, but 30 days should be allowed for processing and data entry prior to the end of the fiscal year.

3.8.2 Modifications that reflect only changes to a customer's identified lines of accounting (but not the amount of total funding) shall be accepted by the WCF business entity.

3.8.3 Modifications that affect the level of services ordered (increases or decreases from the original customer order amount) must be reviewed by the WCF business entity to assess its ability to provide the requested level of service and for possible impacts on other customers. If needed to preclude an adverse impact on the financial integrity of the WCF or other WCF customers, the WCF business entity may assess a charge to the customer to cover the cost of the modification.

3.8.4 The WCF business entity shall notify the customer on the status of their WCF customer order modification within 15 days of receipt. Depending upon the contract process, requirements, refinement and staffing that may be associated with the modification; the WCF business entity manager may require additional time to approve the modified customer order.



3.8.5 Upon acceptance of the modified customer order and signature by a WCF business entity manager, the WCF business entity provides signed copies of the customer order modification to the customer. Once the modification is accepted, the modified service shall begin immediately, consistent with the service start and service end dates.

## 3.9 Terminations of Customer Orders

### 3.9.1 Terminations by Customers.

3.9.1.1 Customers wishing to terminate a previously ordered service should notify and submit a customer order modification to the WCF business entity manager as soon as possible. The customer is liable for funding all costs associated with service delivery until termination, and may be held liable for part or all of any other termination costs incurred by the WCF business entity.

3.9.1.2 A WCF business entity requires a 30-day minimum advance notice for all service terminations to allow sufficient time to evaluate its impact. If there are expected adverse impacts on the financial integrity of the WCF or other WCF customers, the WCF business entity manager should raise the issue to the NASA CFO and WCF Corporate Board for review and consideration of the termination request.

3.9.1.3 The WCF business entity manager should provide an analysis of the impact of the terminated service on cost recovery as well as any proposed corresponding rate changes to the NASA CFO and WCF Corporate Board. The WCF Corporate Board shall review the situation; determine if the failure to purchase the service causes the WCF business entity to experience a significant loss; and shall recommend a position on the termination request to the Center CFO for approval.

3.9.1.4 To avoid the negative consequence referenced above, discipline is required of all involved parties. WCF business entities must be prepared to meet service requests and consider this a contractual obligation. Customer organizations must also consider it a contractual obligation to honor previously agreed-to service levels. While dissatisfaction with the quality or cost of WCF services is a bona fide reason for dropping services, spontaneous reductions are not permitted.

3.9.2 Terminations By WCF Business Entity. There are two circumstances in which a WCF business entity may consider terminating services.

#### 3.9.2.1 Termination Circumstance #1.

3.9.2.1.1 One circumstance for which a WCF business entity may terminate service involves the consumption of services by customers in excess of the amount ordered in their customer order during a given billing cycle. An example is if a customer order is based and priced on a specified level of service but the customer consistently demands a higher, or greater, level of service. In those circumstances, after processing the monthly status billing cycle, the WCF business entity should notify the customer and request a customer order modification to increase the order amount and funding. Customers are obligated to pay for all services delivered.

3.9.2.1.2 If the customer order modification is not received prior to the next status billing cycle (within 30 days), the WCF business entity manager should notify the WCF manager and may seek authorization from the WCF Corporate Board and Agency CFO to terminate the service. Once authorization is granted, the WCF business entity proceeds to terminate the service in accordance with associated vendor and other requirements. The customer is liable for funding all costs

associated with service delivery until termination, and may be held liable by the WCF Board for part or all of any other termination costs incurred by the WCF business entities.

3.9.2.2 Termination Circumstance #2. In the second circumstance, if a WCF business entity determines that it is not in the best interest of the NASA to continue providing a particular service, the WCF business entity may recommend the termination of that line of business to the WCF Corporate Board. The WCF business entity must provide sufficient rationale and notice to the current customer base and the WCF Corporate Board on why the service should be terminated. Only after approval by the WCF Corporate Board and the Agency CFO may a WCF business entity discontinue the service.

## **3.10 Financial Information, Billing and Collection, Closeout**

### **3.10.1 Revenue Recognition and Reimbursements.**

3.10.1.1 A NASA WCF business entity shall bill its customers and recognize revenue at least monthly. The customer funding an order shall be billed for the revenue recognized, or when advance payments have been received, those advances shall be transferred to the appropriate revenue account. In no case shall the total amount of revenue recognized and billed exceed the amount of the customer order. A bill serves multiple purposes. First, it is the source document for use by the customer as a basis of recording cost information. Second, it is the source document for use by the performing WCF business entity to recognize and record revenue.

3.10.1.2 When a WCF business entity receives reimbursement in advance of performance, a bill must be prepared on a monthly basis so that costing information is available to the customer and revenue information is available to the WCF business entity for use in preparing monthly financial reports.

3.10.1.3 The WCF business entity's billing is based upon the price or rate for the good or service provided. The billing amount is not based upon the cost incurred by the performing NASA WCF business entity for the provided service. The price or rate is an amount established prior to performance that is deemed adequate to recover costs and working capital needs of the performing WCF business entity. Unless specifically approved by the NASA CFO, all WCF reimbursements should be received in advance of performance.

3.10.2 Financial Information. Information shall be reported to NASA project, functional, and enterprises on a timely basis at the order level so that all needed information is brought together to support proper management of WCF customer orders. Information on the status of advances and cost accruals shall be reported to WCF customers on a timely basis for each order and shall include the following data:

- a. Customer Order Amount and Date. Copies of the customer order and information on the amount and date of the customer order.
- b. Customer Deposits. Date and amount of customer deposits.
- c. Billings and Collections. Date and amount of billings and collections received directly from customers.
- d. Customer Order Completion Date. Date that work is completed.

e. **Billing and Collection.** Customer orders shall be billed, at a minimum, once every 30 days. Collections shall be immediately deposited to the NASA WCF appropriation.

### 3.10.3 Closeout.

3.10.3.1 The final status bill shall be submitted to the customer no later than 30 days after order completion date (goods and services are completed and delivered to customers or launched, etc).

3.10.3.2 The WCF shall bill customer order cancellation or reduction costs. When a customer order is modified, terminated or reduced in scope after a WCF business entity has commenced work or incurred costs on the customer order, the costs incurred, plus the applied overhead (that is, indirect and other normally allocated overhead, such as general and administrative (G&A) costs plus costs associated with the cancellation or reduction) shall be charged to the customer.

# Appendix A. Definitions

**A.1 Acceptance.** Acceptance constitutes acknowledgment that the supplies or services conform to applicable customer order quality and quantity requirements. Acceptance may take place before delivery, at the time of delivery, or after delivery, depending on the provisions of the terms and conditions of the customer order.

**A.2 Accumulated Operating Results (AOR).** Represents the net difference since the inception of the business entity between (1) expenses and losses, and (2) financing sources including appropriations, revenues, and gains.

**A.3 Amortization.** The process of spreading the cost of an intangible asset over the expected useful life of the asset. For example: a company pays \$100,000 for a patent, they amortize the cost over the 16-year useful life of the patent.

**A.4 Anticipated Reimbursements.** An estimate of reimbursements expected to be earned during the current fiscal year.

**A.5 Business Entity.** A NASA WCF authorized program/function that provides goods or products (i.e. supplies, materials, equipment) or services (i.e. contract administration, test services) on a reimbursable basis to other organizations within NASA; to other agencies or instrumentalities of the United States; to any State, Territory, or possession or political subdivision thereof; to other public or private agencies; or to any person, firm, association, corporation, or educational institution on a reimbursable basis.

**A.6 Capital.** (1) Those goods whose purpose is to generate income. (2) The net difference between assets and liabilities.

**A.7 Capital Expenditure.** The amount used during a particular period to acquire or improve assets such as property, plant or equipment.

**A.8 Capital Investment.** The reinvestment in the infrastructure of business entities.

**A.9 Capitalize.** Record capital outlays as additions to asset accounts, not as expenses; or convert a lease obligation to an asset/liability form of expression called a capital lease, (i.e., to record a leased asset as an owned asset and the lease obligation as borrowed funds).

**A.10 Capitalized Costs.** To record and carry forward into one or more future periods any expenditure, the benefits from which will then be realized. Generally, notwithstanding the period of an expenditure or outlay, that would result in classifying the costs as an asset with costs recognized over future periods.

**A.11 Cash Corpus.** An amount of cash provided to start up a working capital fund. These funds are used to cover expenses until customer advances or collections for goods and services provided are received.

**A.12 Charter.** Formal document prepared by the Program Manager and approved by the NASA CFO to establish a business entity. The charter delineates the Program Manager's responsibility, authority, and major functions; describes relationships with other organizations that use and/or support the program and identifies the goods/products that will be provided or the services that will

be performed. The charter also describes and authorizes unique management requirements of that business entity.

**A.13 Costs.** The monetary value of resources used or sacrificed or liabilities incurred to achieve an objective, such as to acquire or produce a good or to perform an activity or service. Depending on the nature of the transaction, cost may be charged to operations immediately, (i.e., recognized as an expense of the period, or to an asset account for recognition as an expense of subsequent periods).

**A.14 Cost Allocation.** A method of assigning costs to activities, functions, or outputs.

**A.15 Cost Estimate.** A judgment or opinion regarding the cost of an object, commodity, or service. A result or product of an estimating procedure, which specifies the expected dollar cost required to perform a stipulated task or to acquire an item. A cost estimate may constitute a single value or a range of values.

**A.16 Cost Per Output.** The term Cost per Output is synonymous with Unit Cost. It is the relationship of resources consumed to outputs produced. Simply stated: the Cost of Resources divided by the Number of Outputs equals the Cost per Output or Unit Cost.

**A.17 Customer Order.** A funded request for goods or services from an ordering activity (customer). A customer order creates a quasi-contractual relationship between a NASA WCF business entity and its customer since acceptance of a customer order requires that the performing business entity agree to perform the work for the customer entity. Customer orders also provide the budgetary and cash resources necessary to finance operations.

**A.18 Depreciation.** Amount of expense charged against business entity earnings to recognize the cost of a capital asset over its useful life.

**A.19 Expenditure.** The dollar value of goods and services received for which payment (cash outlay) has been made. Expenditure differs from expense in that expense refers to the consumption (use) of a good or service.

**A.20 Expenses.** Outflows or other using up of assets or incurrences of liabilities (or a combination of both) during a period from providing goods, rendering services, or carrying out other activities related to an entity's programs and missions, the benefits from which do not extend beyond the present operating period.

**A.21 Fixed Costs/Expenses.** Operating expenses that are incurred to provide facilities and organization that are kept in readiness to do business without regard to actual volumes of production and sales. Fixed costs remain relatively constant until changed by managerial decision. Within general limits they do not vary with business volume.

**A.22 Indirect Cost.** That portion of cost that is indirectly expended in providing a product or service for sale (cannot be traced to a given cost object in an economically feasible manner) and is included in the calculation of Cost of Goods Sold, (i.e. rent, utilities, equipment maintenance, etc.).

**A.23 Overhead.** Costs associated with providing and maintaining a working environment. For example: renting the building, heating and lighting the work area, supervision costs and maintenance of the facilities. Includes indirect labor and indirect material.

**A.24 Rates.** The prices customers are charged for specific items of supply or services on new orders received and accepted during a specific fiscal year. WCF rates are calculated to recoup all costs associated with the operating and capital budgets including all labor and non-labor, direct, indirect,

and general and administrative overhead costs.

**A.25 Rate Change.** The WCF rate change is the percentage change of the stabilized rate or price between fiscal years. As an example, the budget year rate is determined by dividing the approved Direct Labor Hour rate proposed for the budget year by the stabilized Direct Labor Hour rate in effect for the current execution year. That value, expressed as a percentage (plus or minus from a base of one), is the composite price change rate customers will use in their appropriated funds submissions.

**A.26 Revenue.** Revenue is an inflow of resources that the Government demands, earns, or receives by donation. Revenue can include inflows of resources from selling goods and providing services to customer. The term "revenue" does not encompass all financing sources of Government reporting entities, such as most of the appropriations they receive.

**A.27 Revolving Funds.** A fund established by the Congress that conducts continuing cycles of business-like activity, in which the fund charges for the sale of products or services and uses the proceeds to finance its spending, usually without requirement for annual appropriations. Intragovernmental revolving funds conduct business-like operations mainly within and between Government agencies. A WCF is an intragovernmental revolving fund.

**A.28 Stabilized Rates.** The cost customers are charged for the goods and services provided by a WCF business entity. A stabilized rate is established for the fiscal year(s) budget being formulated during the budget review process. The stabilized rate is determined by taking the approved output measure for the budget year and adjusting it for changes in the costs of purchases and for the impact of prior year gains or losses as reflected by the Accumulated Operating Result and other needs for working capital. This annual stabilized rate is the rate that shall be charged for all new customer orders received and accepted during that specific fiscal year, regardless of the fiscal year the work is actually executed and billed.

**A.29 Standard Price.** The price customers are charged and which remains constant throughout a fiscal year except for the correction of significant errors or other extraordinary events and then, only with approval of the NASA CFO.

**A.30 Working Capital Fund.** A revolving fund that operates as an accounting entity in which the assets are capitalized and in which all income is derived from the operations of its activities. The fund is available to finance continuing operations without fiscal year limitations.



## Appendix B. Acronyms

CFO	Chief Financial Officer
DCF	Discounted Cash Flow
DCFO	Deputy Chief Financial Officer
DoD	Department of Defense
EPR	Estimated Price Report
FASAB	Federal Accounting Standards Advisory Board
GWAC	Government Wide Acquisition Contract
IRR	Internal Rate of Return
NOR	NET OPERATING RESULTS
NPD	NASA Policy Directive
NPR	NASA Procedural Requirement
NPV	Net Present Value
OMB	Office of Management and Budget
PPBE	Planning, Programming, Budgeting, and Execution
ROA	Return on Assets
ROI	Return On Investment
SFFAS	Statement of Federal Financial Accounting Standard
SLA	Service Level Agreement
USSGL	United States Standard General Ledger
WCF	Working Capital Fund

# Appendix C. Business Case Development Instructions For NASA Working Capital Fund Candidates

## C.1 Introduction

C.1.1 Use of the National Aeronautics and Space Administration (NASA) Working Capital Fund (WCF) presents organizations with the ability to finance operations in a manner consistent with commercial best practices. It allows flexibility in operational planning, procurement, and customer relationship management. However, before an organization converts its funding source from appropriated to working capital funds, it must ensure business viability and prepare for the transition to the WCF. This appendix provides a framework for candidate organizations to perform financial and operational analysis and to develop the required business case analysis document.



**Figure B-1, Business Case Process**

## C.2 Scope and Applicability of Instructions

C.2.1 All WCF candidate organizations as well as existing WCF business entities that seek to add a new line of business, are required to develop a business case that complies with these instructions as part of the evaluation process. These instructions apply to all applicants applying for inclusion in the NASA WCF.

## C.3 Role of the Business Case.



### C.3.1 The Business Case Serves Two Primary Roles:

- a. Ensures candidate organizations understand and can quantify both the risks and benefits associated with transitioning to the NASA WCF.
- b. Provides the NASA WCF managers with sufficient information to make an appropriate decision on whether the candidate should ultimately be included in the WCF.

C.3.2 In completing the business case, it is helpful to think of the candidate organization as a private company (one whose financial goal is to break even over time rather than make a profit) seeking investment funding. The business case should provide sufficient information to allow a third party to decide whether or not to invest funds in the venture.

## C.4 Business Case Development and Review Process.

This section presents a recommended process for developing, reviewing, and submitting the business case. As shown in the figure below, the process is composed of three phases:

### C.4.1 Data Collection and Analysis.

C.4.1.1 During the first phase of business case development, the candidate organization's leadership must appoint a study team that will be responsible for all facets of business case development. The team will be the focal point for all matters related to collecting background data, performing financial and operational analysis, developing the report, and responding to questions from the WCF Management Team. The team will spend a large portion of time assembling or generating historical organizational, financial, and operational data that describes the past performance of the candidate organization. This material may include:

- a. Strategic plans.
- b. Staffing plans.
- c. Financial statements.
- d. Accounting reports.
- e. Organizational mission/charters.
- f. Cost reports.
- g. Production statistics.
- h. Market analysis.
- i. Budget data.
- j. Process flow charts.

C.4.1.2 One thing to consider during this collection process is the ready availability of the data. Much of this data will be needed to perform the day-to-day management of the organization once admitted to the WCF. If the data is unavailable, unreliable, or difficult to collect, the study team should include a plan to improve these conditions as part of the business case.

C.4.1.3 The team will develop a "go-to-market" strategy that will address how the organization will identify and service customers, what its growth strategy is, and how it will compete with other available alternatives. This strategy will include an assessment of the competitive environment of the goods and services the organization provides (or plans to provide). The strategy should also include any plans to expand the business after admission to the WCF, along with a rationale for making the change.

C.4.1.4 The team must also develop production and financial forecasts to assess the demand for the organization's goods and services. This assessment should take into account the market environment and competitive forces and their impact on future sales.

C.4.1.5 Any organizational change involves some degree of risk. Transiting into the WCF generally carries financial and operational risk. The study team must identify transition risks and develop a risk mitigation strategy to address each risk area.

C.4.1.6 Finally, the team must define and quantify the value proposition for transitioning the organization into the WCF. Specifically, describe the reasons why the organization should transition, including anticipated cost savings and payback.

C.4.2 Report Development and Submission. Once the team has completed the necessary analysis, it must prepare the business case document, complying with these instructions. Once the document has been drafted, NASA Headquarters functional proponent should review it to ensure its completeness and that it adequately substantiates a value proposition as a viable WCF candidate. It is critical that the candidate's leadership is in total agreement with the business case and supportive of the analysis. Upon completion of recommended revisions and program manager approval, the final document should be forwarded to the NASA Office of the Chief Financial Officer for review and comment.

C.4.3 Review and Decision. In the final phase of the development process, the candidate's leadership and project team should be available to respond to questions from the WCF Management Team. They may be required to formally present the business case. They may also be required to make adjustments to the business case document as needed and take corrective actions to address deficiencies identified during analysis or review by WCF Management Team. If necessary, they will resubmit the business case for final decision.

## **C.5 Timeline and Resource Commitment.**

C.5.1 This process requires significant time and resource commitment, it is important that a candidate perform adequate due diligence prior to admission to the WCF to avoid financial or operational problems.

## **C.6 Business Case Document Outline.**

C.6.1 The format and content of the business case document is intended to be flexible to allow for the wide variety of organizations that will apply for inclusion in the WCF, as well as allow for creativity on the part of the candidate organizations. However, all business case documents must contain a common core analysis.

C.6.2 Required Sections. The following sections must be included in all business case submissions.

While the section itself is required, the scope and depth of content are largely at the discretion of the candidate organization. It is important that the business case contain a complete and accurate picture of the rationale and supporting data for transferring the organization into the WCF. Therefore, the candidate's study team should make the most compelling case possible.

**C.6.2.1 Purpose.** This section serves as an introduction for the entire business case document. It should include a purpose statement and summary of the document.

**C.6.2.2 Organizational Description.** This section should include an in-depth description of the candidate organization. It should include the organization's mission, structure, and a description of the goods and services the organization provides. It should also include a description of operating locations and facilities, as well as, features of the organization and operation that are unique from other government or competitive organizations. It should also include any pertinent statutory requirements that impact operations or that mandate a transition to the WCF.

**C.6.2.3 Competitive Environment.** This section should include a thorough assessment of the organization's competitive environment for the goods and services it provides. If there are no commercial or government alternatives, state so. This section should include not only competitive prices, but also a characterization of the marketplace including how customers make buying decisions, typical order sizes, and factors impacting competitive advantage. Furthermore, this section should include a go-to-market strategy that addresses how the organization identifies and services customers, what its growth strategy is, and how it will compete with other available alternatives.

**C.6.2.4 Annual Financial Information.** This section should include at least the last 3 years of financial data. This will most likely be extracted from annual financial reports or any other accounting and financial information that is available. In addition, this section may or may not provide the same level of information that is reflected in the NASA audited financial statements since the candidate organization may not be required to produce this information at this time. The section should also include budget projections along with a description of the program base and anticipated enhancements in the coming years as a result of transferring to the WCF. If the organization utilizes physical assets in production, characterize the degree to which the assets are fixed or variable. Also include the amount of cash on hand (advance funding) to fund the transition to the WCF. This information is relevant because no cash corpus was provided to NASA to fund the transition to the NASA WCF. The information should be sufficient for the evaluation team to understand the cost of operations, how the funds are spent, projected revenue, and what is planned in the coming years.

**C.6.2.5 Annual Production Statistics.** This section should include production data for the goods and services produced by the organization. One of the key requirements for a WCF organization is the ability to forecast production and revenue in order to set pricing and size production capacity. The study team should spend an appropriate amount of time developing these statistics and the collection methodology to ensure the organization can adequately meet this requirement.

**C.6.2.6 Rationale for Inclusion in the WCF.** This section contains the fundamental reasons why the organization is a good fit for the WCF. It should factor in all the qualitative and quantitative benefits the organization and NASA will gain from transferring to the WCF. It should include a characterization of the improvements in cost, quality, and cycle time in meeting customer demands. It should also include a discussion of the capital improvements or enhancements that will be funded once the organization is admitted to the WCF. It should include a description of how the organization meets the following selection criteria:

- a. Must possess the capability to produce one or more goods or services that are needed on a recurring and relatively predictable basis within NASA and/or other federal government entities or other sources.
- b. Operation as a NASA WCF business area will result in a better product/service and/or decreased costs to the federal government.
- c. Demand for goods or services must be from multiple customers within NASA and/or other federal government entities or other sources.
- d. Must use "Full Cost" methodology to identify costs of goods and services.
- e. Must possess the capability to charge prices or rates that approximate the full costs of the provided goods and services.

C.6.2.7 Estimated Transition Costs. This section should include a complete assessment of the cost required to transition to the WCF. It should include the costs of process changes, transition planning, training, and information technology changes required to integrate operations into the WCF. The analysis should also include a time dimension to indicate when the costs will be incurred. Some costs will be one-time only (i.e. transition training), while others will be recurring (i.e. software and hardware maintenance). This section provides data for the first half of the payback analysis. The next section, cost savings, provides the rest of the required data.

C.6.2.8 Estimated Cost Savings. This section should include an assessment of the cost savings that may be generated by the transition to the WCF. As was the case with transition costs, this information should have a time dimension to show both the immediate and recurring savings. The section should also include a description of how the savings will be generated. Recall that savings may be generated by process efficiencies, better asset leverage from economies of scale, strategic sourcing, better funds management (i.e. no end-of-year spending drills), and effective capacity management. Short and long term savings estimates should be made for all applicable mechanisms. While cost savings is not a prerequisite for inclusion in the WCF, to the extent that use of the WCF mechanism enables cost savings and process efficiencies, the business case should reflect potential savings.

C.6.2.9 Other Benefits. This section should include qualitative benefits from joining the WCF. It may also include topics that have not been addressed previously that address unique features of the organization.

#### C.6.2.10 Payback Analysis.

C.6.2.10.1 As mentioned earlier, in looking at the candidate organization as a commercial enterprise, sufficient payback should be generated to warrant taking on the transition costs and risks. Financial payback is constrained by projected cost savings generated by the transition to the WCF. While cost savings are not a requirement for inclusion, transition investments should be balanced with tangible benefits (whether financial or operational).

C.6.2.10.2 Payback analysis should include net cost savings projections (the difference between the cost savings and the transition costs) as well as a return on investment (ROI) and break-even analysis. ROI is defined as the profit or loss resulting from an investment transaction, usually expressed as an annual percentage return. ROI is calculated as follows:

$$\text{ROI} = \frac{\text{Net Cost Savings}}{\text{Net Transition Costs}}$$

### Figure A-2, ROI Calculation

C.6.2.11 ROI is a reasonable indicator of the return per unit of investment. In developing the financial analysis for the business case, the study team may want to include other financial analysis techniques such as:

- a. Net Present Value (NPV). An approach used in capital budgeting where the present value of cash inflow is subtracted from the present value of cash outflows. NPV compares the value of a dollar today versus the value of that same dollar in the future, after taking inflation and return into account. If the NPV of a prospective project is positive, then it should be accepted. However, if it is negative, then the project probably should be rejected because cash flows are negative.
- b. Return on Assets (ROA). A useful indicator of how profitable a business is relative to its total assets. ROA is calculated by dividing annual earnings by total assets. ROA is displayed as a percentage. Sometimes this is referred to as Return on Investment.
- c. Discounted Cash Flow (DCF). A method used to estimate the attractiveness of an investment opportunity. DCF is calculated by estimating cash flows into the future and discounting them back at an appropriate interest rate.
- d. Internal Rate of Return (IRR). The IRR for an investment is the discount rate for which the total present value of future cash flows equals the cost of the investment.

C.6.2.12 Each of these metrics has strengths and weaknesses in supporting investment decisions. The key is to select the technique(s) that most accurately portray the financial data.

C.6.2.13 In addition, to ROI, the business case document should contain a break-even analysis. Break-even analysis calculates the length of time required to recover the cost of an investment (referred to as the payback period). Payback period is usually measured in years. Obviously, the shorter the payback period, the more attractive the investment is.

C.6.2.14 Risk Assessment. The risk assessment should include an honest analysis of the transition risks associated with the transition to the WCF. This should include a description of the risks, a determination of the probability that key planning assumptions will not occur as planned, and a mitigation strategy for addressing each shortcoming. Typical risks include:

- a. Longer than expected payback period.
- b. Longer than expected transition time to new organization or only partial integration (only some Centers participate).
- c. Lower than predicted procurement savings from strategic sourcing.
- d. Higher than estimated transition costs.

C.6.2.15 Conclusion. This section should include a concluding argument for transitioning the organization to the WCF. No new information should be included here, but rather the section should summarize the case made through the whole document, emphasizing the key points.

C.6.3 Optional Material. In addition, to the material listed as required, the study team may want to include other information that provides a comprehensive view of the benefits and costs of transitioning to the WCF. This is information that will be useful in determining if the candidate organization should be selected and in understanding if it is prepared for the transition to the WCF. As with all financial analysis, the key is to be balanced and complete. Candidates should not try to sway the decision by providing only positive information. Again, one of the reasons the business case is developed is to ensure the organization can be financially and operationally viable in the WCF environment. The fact that an organization is not admitted into the WCF is not a negative reflection of the organization, but rather a function of the unique nature of operating in a WCF environment.